

E-3202Cash Drawer

Operator's Manual

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Note: This manual covers E-3202/Cash Drawer printers with version A00.02 firmware and greater.

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Part Number: 88-2274-01 Revision: B

Agency Compliance and Approvals:



This device complies with FCC CFR 47 Part 15 Class B and ICES-003-B.



The manufacturer declares under sole responsibility that this product conforms to the following standards or other normative documents:

EN 55024-1 (1998)



UL1950 Information Technology Equipment



As an Energy Star Partner, the manufacturer has determined that this product meets the Energy Star guidelines for energy efficiency.

Important Safety Instructions:

This printer has been carefully designed to give you many years of safe, reliable performance. As with all electrical equipment, there are a few basic precautions you should take to avoid hurting yourself or damaging the printer:

- Carefully read the installation and operating instructions provided with your printer.
- Read and follow all warning instruction labels on the printer.
- Place the printer on a flat, firm, solid surface.
- > To protect your printer from overheating, make sure all openings on the printer are not blocked.
- ➤ Do not place the printer on or near a heat source.
- Do not use your printer near water, or spill liquid into it.
- ➤ Be certain that your power source matches the rating listed on your printer. If you are unsure, check with your dealer or with your local power company.
- ➤ Do not place the power cord where it will be walked on. If the power cord becomes damaged or frayed replace it immediately.
- ➤ Do not insert anything into the slots or openings on the printer.
- Only qualified, trained service technicians should attempt to repair your printer.

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1.0 Introduction

The E3202/Cash Drawer hereafter referred to as 'the printer', is a high quality/low cost direct thermal receipt printer. The printer's design and small footprint makes it a perfect choice for applications such as point of sale receipts, office, warehousing, and barcode applications.

This manual provides all the information necessary to operate the printer. Refer to the instructions included with the software you have chosen.

If you wish to write a custom program, visit our website at http://www.datamaxcorp.com for a copy of the *Programmer's Manual*.



1.1 About this Printer

This printer offers the following standard features:

Standard Features

Printing

- Direct Thermal Printing
- > 203 DPI, 8 dots/mm

Memory

- > SRAM 256 KB
- Flash 512 KB

Interfaces

This printer is equipped with:

- RS-232 serial interface via a mini-DIN socket.
- > Epson 24V compatible cash drawer interface

Operational

- ➤ 2 multifunction buttons
- ≥ 2 status LEDs



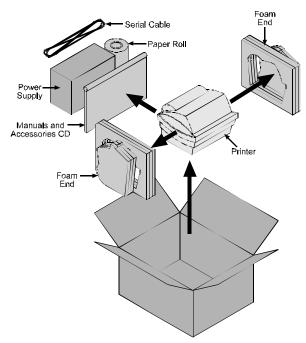
2.0 Before using the Printer

Inspect the shipping container(s) for damage, if damage is evident notify the shipping company to report the nature and extent of the damage.

The printer is carefully packaged to avoid any damage during transit. In order to operate the printer you will need to remove the packaging materials, (i.e., tape and foam) that were placed in the printer for shipment.

2.1 Inspecting the Printer

After removing the printer from the packaging material, check the contents of the package. The following items should be included:



2.2 Media Requirements

The following is a limited overview of media characteristics. For complete information and advice regarding your specific application needs, always consult a qualified media specialist or a Datamax Media Representative.

Paper Specifications:

Media Type:	Continuous Thermal Receipt Paper
Min. Media Width:	0.55" (14.2mm)
Max. Media Width:	3.34" (85mm)
Max. Media Thickness:	5.7mil (156um)
Max. Outside Roll Diameter:	2.35" (60mm.)
Core:	25mm ± 1mm



Settling up the Printer

3.0 Introduction

This chapter explains how to connect your printer and load media.

3.1 Connecting the Printer

1. Connect the Communication Cable's mini-DIN connector to the printer and the other end (DB9S) to the host.

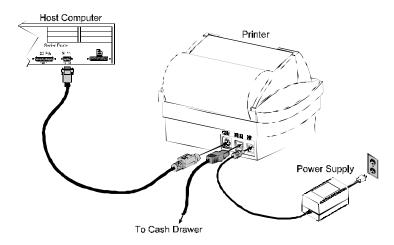
Warning: DO NOT connect a mouse or other peripheral equipment to this connector.

2. Connect the cash drawer cable (not supplied) to the printer and the other end to the cash drawer.

Warning: DO NOT connect this printer to any type of telephone line or equipment.

3. Connect the one end of the power supply to the back of the printer and the other end to a properly grounded outlet.

Once the power supply has been connected the printer will automatically power up. To remove power simply disconnect the power supply from the printer.

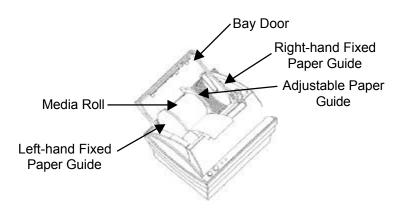


Cash Drawer & Cash Drawer Cable are not supplied

3.2 Loading Media

This section explains the loading instructions for loading the printer with media.

- Open the Bay Door by pressing upward with your thumb as shown. See Appendix C for more information.
- Place the Media Roll into the printer, the edge of the media should be against the Fixed Paper Guide. The roll should unravel as shown and have the 'Sense Marks' (if any) to the left.
- 3. Move the Adjustable Paper Guide from the far-left side of the media bay to a slot that accommodates your media. See Appendix C of this manual for more information of the position of the Paper Guides.

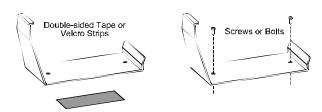


4. Pull a few inches of media out of the printer and close the Bay Door.

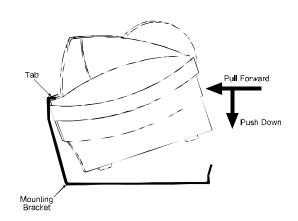
3.3 Optional Mounting Bracket

An optional Mounting Bracket is available for installations that require a solid fixed mount.

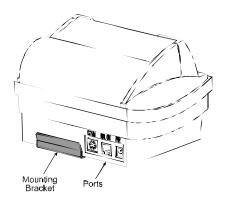
 Depending on your mounting surface the Mounting Bracket can be secured using Screws, Bolts, Double-sided tape, or Velcro strips.



 Hook the front of the printer under the Mounting Bracket Tab. Pull forward and push down to lock the printer into the bracket.



3. Be sure the Mounting Bracket does not interfere with the ports on the back of the printer





Printer Operation

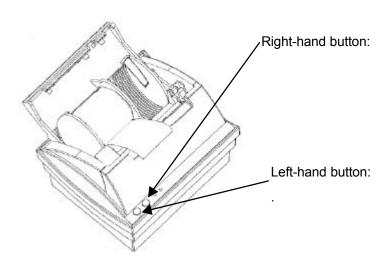
4.0 Printer Operation

This section will explain in detail the functions of the printer's buttons and indicators, operating modes, and settings.

4.1 Buttons and Indicators

4.1.1 Buttons

The printer is equipped with two push buttons. These multi-function buttons are sensitive to the length of time the button is held down. The printer recognizes a 'long push' when the button is held down for more than two seconds. A 'short push' is when the button is pushed down for less than one second.

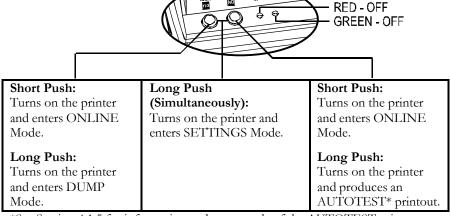


4.1.2 Operating Modes and Indicator Status

Red Indicator	Green Indicator	Mode	Comments
OFF	OFF	PRINTER OFF	See Section 4.1.3
OFF	Flashing	IDLE	See Section 4.1.3
ON	ON	ONLINE	See Section 4.1.3
ON	OFF	OFFLINE	See Section 4.1.3
Flashing	OFF	ERROR	See Section 4.1.4
ON	ON	DUMP	See Section 4.1.4
ON	Flashing	SETTING	See Section 4.1.4
Flashing	Flashing	DOWNLOAD	See Section 4.1.4

4.1.3 Button Functions

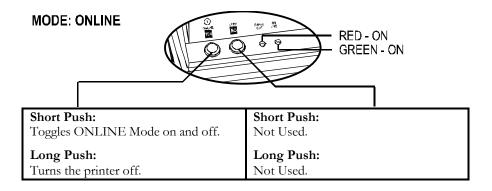
MODE: PRINTER OFF

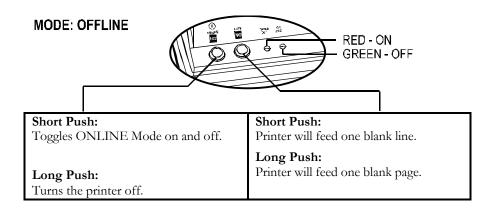


^{*}See Section 4.1.5 for information and an example of the AUTOTEST printout.

Note: After approximately 60 seconds of inactivity the printer will automatically enter 'Idle Mode'. In this mode the Red LED will turn off and the Green LED will flash slowly. Pressing either button will exit this mode and return to the previous mode.

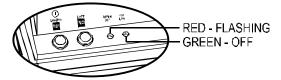
Button Functions Continued...





4.1.4 Other Modes

MODE: ERROR

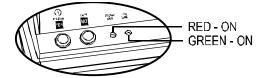


There are only three possible error conditions, they are as follows:

Error	Cause	Action
Paper Out	The printer is out of media stock or	Replace or correctly load
	the stock has been loaded incorrectly.	Stock.
Head Up	The printer 'Lid' is not down and	Be sure the 'Lid' is
	latched.	down and latched.
Printhead	The printhead has exceeded normal	Allow 5-10 minutes for
Overheated	operating temperature.	the printhead to cool.

Once the error condition has been satisfied the printer will automatically exit the ERROR mode and return to the OFFLINE mode. To return to the ONLINE mode and continue printing, press the Left Button once.





This mode will allow the user to verify the data received by the printer. While in dump mode, the printer will print the received data in hexadecimal.

To enter DUMP mode:

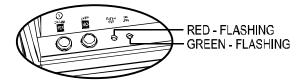
With the printer off, (both LED's off), press and hold the Left Button until the word "DUMP" is printed.

To exit DUMP mode:

Turn the printer off, (press and hold Left Button) or disconnect power.

Other Modes Continued...

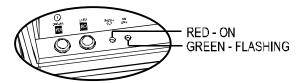
MODE: DOWNLOAD



Your printer is equipped with a flash memory. The software loaded in the flash memory can be updated by a downloading procedure. When in DOWNLOAD mode the printer indicators will alternatively blink and at the end of the operation the printer will automatically switch to OFF. As you may change your software using the downloading procedure, each time you switch your printer on, the software will be verified. If the software is not operational for any reason, your printer will turn to download mode (indicators alternatively flashing) waiting for new software.

Software flash files are available through Datamax Technical Support at (407) 523-5550. Datamax Technical Support will determine if this procedure is necessary.





The SETTINGS mode allows the user to modify the printer's parameters. See section 4.6 for more information.

4.1.5 Autotest Printout

The printer performs an Autotest and prints a test page in order to check the printhead and diagnose print quality. 'Autotest' is printed on the first line. To perform this test; turn the printer off (both lights off). Then press and hold the right button until the Autotest begins to print.



4.2 Emulation Choices

The table below outlines emulation choices for the E-3202 with Cash Drawer printer with version A00.02 firmware and greater.

Emulation Name	Uses
ESC/POS®	ESC/POS® is the native language of the E-3202
	Custom programs designed to control the E-3202
	• POS system software that uses Epson POS printers (or at least Epson ESC/POS® printer language).
	Datamax/Seagull Windows driver.
Epson 24 pin	Windows "page" mode
	• The generic Epson compatible 24-pin printer driver which ships with Windows95.
	• TrueType fonts and graphics, (Factory Default).
Custom 1	Not Used
Reserved 1	Windows "line" mode
	• Used for Windows applications with printouts longer than 29cm (11.4").

4.3 Common Configurations

What do you want to do with the E-3202? There are several options. Find the description that best matches your project and follow the setup directions.

If you want to	Do this
Print with application software written specifically for the Epson ESC/POS® language.	 Setup the E-3202 printer and apply AC power. Connect the data cable between the E-3202 and your PC. Connect the cash drawer cable (not supplied) to the printer and the other end to the cash drawer. Configure the printer for use with the ESC/POS® emulation. Put a roll of continuous thermal paper into the printer. Print from your application software.
Print with other Windows applications using the E-3202 Windows driver.	 Setup the E-3202 printer and apply AC power. Connect the data cable between the E-3202 and your PC. Install the Datamax/Seagull Windows driver from the E-3202 CD. Configure the E-3202 for ESC/POS® emulation. Load the appropriate paper into the E-3202. Start you application software and select the E-3202 Windows driver as the printer for your application. Print from the E-3202 as appropriate.

If you want to		
configure your E-3202		
for this	Do	this
The Datamax/Seagull driver	1.	Make sure that a roll of continuous thermal paper is
and ESC/POS® applications	1.	installed in your E-3202.
all require that you set the	2.	With your E-3202 powered up and both lights on,
printer to ESC/POS®	۷.	press the left-hand button (ON-LINE/YES), and
emulation.		hold it down until both lights go off. The E-3202 is
emulation.		now off.
	3.	Hold both buttons (ON-LINE/YES and LF/FF/NO)
•		down until both lights come back on and the printer
		starts to print out the PRESENT SETTINGS.
	4.	When the printing stops, respond to the printed
		message "To keep settings unchanged push the 'NO'
		key. To enter the set-up menu push the 'YES' key"
		by pressing the left-hand button (ON-LINE/YES).
	5.	The SET-UP MENU instructions are then printed.
		"To change settings: use the 'NO' key to move from
		chapter to another. Use the 'YES' key to enter a
		chapter. Within a chapter use the 'NO' key to move from one parameter to another. Use the 'YES' key to
		validate your parameter."
	6.	Move through the communication settings making
	0.	sure to set the parameters so that they match those of
		your PC's communication port.
	7.	When you enter the Emulation chapter be sure to set
		it to ESC/POS®.
	8.	In the Character Set chapter the default is code page
		850, 12 x 24, USA. You can change it if needed.
	9.	In the Page chapter the default is six line per inch (6
		lpi). You can change it if needed.
	10.	In the Other chapter you can turn on or off the Auto
		Line Feed and Auto Carriage Return if needed. You
		can also increase or decrease the contrast of the
	11	thermal print to make it darker or lighter.
	11.	When finished, all of your changes will be printed. If
		you want to save them, press the left-hand (ON-
		LINE/YES) button. If you do not want to save your changes, press the right-hand (LF/FF/NO) button.
		changes, press the fight-hand (LF/FF/NO) button.

Continued...

The generic Epson
compatible 24-pin Windows
printer driver.

- Make sure that a roll of continuous thermal paper is installed in your E-3202.
- With your E-3202 powered up and both lights on, press the left-hand button (ON-LINE/YES), and hold it down until both lights go off. The E-3202 is now off.
- Hold both buttons (ON-LINE/YES and LF/FF/NO) down until both lights come back on and the printer starts to print out the PRESENT SETTINGS.
- When the printing stops, respond to the printed message "To keep settings unchanged push the 'NO' key. To enter the set-up menu push the 'YES' key" by pressing the left-hand button (ON-LINE/YES).
- 5. The SET-UP MENU instructions are then printed. "To change settings: use the 'NO' key to move from chapter to another. Use the 'YES' key to enter a chapter. Within a chapter use the 'NO' key to move from one parameter to another. Use the 'YES' key to validate your parameter."
- Move through the communication settings making sure to set the parameters so that they match those of your PC's communication port.
- 7. When you enter the Emulation chapter be sure to set it to **Epson 24 pin**.
- 8. In the Character Set chapter the default is code page 850, 12 x 24, USA. You can change it if needed.
- In the Page chapter the default is six line per inch (6 lpi). You can change it if needed.
- 10. In the Other chapter you can turn on or off the Auto Line Feed and Auto Carriage Return if needed. You can also increase or decrease the contrast of the thermal print to make it darker or lighter.
- 11. When finished, all of your changes will be printed. If you want to save them, press the left-hand (ON-LINE/YES) button. If you do not want to save your changes, press the right-hand (LF/FF/NO) button.

4.4 Connecting to an ESC POS Terminal

The default configuration of your printer is ESC/POS. Check your Terminal communication parameters and change the printer settings to match your terminal settings.

Default Communication parameters

Speed:	9600 baud
Data:	8 bits
Parity:	None
Control:	Hardware

To check the current emulation and communication parameters of your printer:

- 1. Make sure that a roll of paper is loaded.
- 2. Set the printer to "Off".
- 3. Press both buttons simultaneously until the configuration is printed.

If the configuration is not correct see section 4.4 Changing the Default Settings.

4.5 Connecting to a PC

The default configuration of your printer is ESC/POS. In order to use your printer with a PC you will need to check the setting of your printer and install the printer driver on your PC. Follow the steps below to configure your printer for use with a PC.

PC parameters

Your printer will use the Datamax/Seagull Windows Driver, (located on the Accessories CD). If this printer is already installed on your PC (see 'Printers' in your computers 'Control Panel'), check that the serial port is selected and configure it as indicated below.

If the Datamax/Seagull Windows Driver is not installed,

- 1. Double-click the 'Printers' icon in the 'Control Panel'
- 2. Double-click on 'Add a Printer'.
- 3. Install the 'Datamax E-3202' printer driver.
- 4. Choose the serial port and set the port to the following parameters:

Speed:	9600 baud
Data:	8 bits
Parity:	None
Stop bit:	1
Control:	Hardware

Printer parameters

- 1. Make sure that a roll of paper is loaded. Set the printer to the Off line mode.
- 2. Simultaneously press both buttons for at least two seconds. The configuration is printed.
- 3. Answer Yes to modify the default setting.
- 4. You are now in the Communication Chapter. Check your PC port communication setting and match the printer communication settings to your PC (baud rate, Data, Parity, control, The stop bit is always 1 for the printer, it is not modifiable).

- 5. If the communication settings are correct press No. If they are not correct press Yes and modify them by pressing Yes to accept the setting and No to change it.
- 6. When the desired communication settings are chosen press Yes to enter the emulation menu.
- 7. You are now in the emulation menu. Press Yes to print the current setting.
- 8. Press No to change to ESC/POS. (If ESC/POS is already printed press Yes). Press Yes to enter the next section.
- 9. If no more changes are required press No until the end, and then press Yes to save your changes.
- 10. Your printer is now configured to work with your PC. You can use your favorite text editor to create your printouts.

4.6 Changing the Default Settings

Your printer is shipped with the following standard configuration:

Communication Parameters		Emulation		Character Sets	
Speed:	9600 baud	ESC/	POS	Code page:	850
Data:	8 bits			Width:	12x24
Parity:	None			Country:	USA
Control:	Hardware				

Page		Media		Other	
Line spacing:	6 lpi	Media:	Paper	Auto LF:	Off
				Auto CR:	Off
				Contrast (20%):	+00%
				Contrast (5%):	+00%

Printing The List Of Parameters

While the printer is turned OFF, switch to the Setting Mode by pushing simultaneously both buttons for at least two seconds. The printer prints the following settings (Standard configuration):

Datamax E-3202 Version: AA xx.xx PRESENT SETTINGS

Communication parameters

Speed: 9600 baud Data: 8 bits Parity: None Control: Hardware

To keep these settings unchanged push the 'NO' key.

To enter the set-up menu push the 'YES' key.

Set-up menu

To change settings:

- ➤ Use the 'No' key to move from a chapter (section) to another.
- ➤ Use the 'YES' key to enter a chapter (section).

Within a chapter (section):

- > Use the 'No' key to move from a parameter to another.
- ➤ Use the 'Yes' key to validate your parameter.

COMMUNICATION PARAMETERS

Data transmission choice of the serial port with the terminal.

1200	baud
2400	baud
4800	baud
9600	baud
19200	baud
38400	baud
57600	baud
115000	baud

To skip push NO. When the selected choice is displayed push YES.

Format of the serial bus

8 bits

7 bits

To skip push NO. When the desired setting is displayed push YES.

Parity

None

Even

Odd

To skip push NO. When the desired setting is displayed push YES.

Flow control of the data transmission

Hardware

DTR low

Xon/Xoff mode

To skip push NO. When the desired setting is displayed push YES.

EMULATION

Epson-24 pin

Custom 1

Reserved 1

ESC/POS®

To skip push NO. When the desired setting is displayed push YES.

CHARACTER SETS

850 (International)

852 (Latin 2)

857 (Turkish)

860 (Portuguese)

861 (Island)

862 (Hebrew)

863 (French)

858 (International with the 'Euro' symbol)

437 (English, USA)

To skip push NO. When the selected choice is displayed push YES.

Width

9x24

12x24

16x24

To skip push NO. When the selected choice is displayed push YES.

Country

USA

France

Germany

United kingdom

Denmark 1

Sweden

Italy

Spain 1

Japan

Norway

Denmark 2

Spain 2

Latin America

To skip push NO. When the selected choice is displayed push YES.

PAGE

```
Line spacing
6 lpi
8 lpi
```

To skip push NO. When the selected choice is displayed push YES.

MEDIA

```
Media
Paper
Labels (not used)
```

To skip push NO. When the selected choice is displayed push YES.

OTHER

```
Automatic line skip after enter
Yes
No
```

To skip push NO. When the selected choice is displayed push YES.

```
Automatic enter after line skip
Yes
No
```

To skip push NO. When the selected choice is displayed push YES.

Contrast by 20%

The printer will ask you to increase or decrease the contrast. The contrast can be increased or decreased by steps of 20 %. The limit is 100. (+20%, +40%, +60%, +80%, -80%, -60%, -40%, -20%)

To skip push NO. When the selected choice is displayed push YES.

Contrast by 5%

The printer keeps the contrast selected in the preceding menu in memory and offers you the choice to modify it by steps of 5 %: example if you have chosen +40 in the precedent menu, the choice will be +55% +50% +45% +40% -35% - 30% -25%

To skip push NO. When the selected choice is displayed push YES.

Once the desired parameters have been selected:

- > Push 'YES' to save the changes and exit from the setting menu.
- > Push 'NO' to exit without saving.

All new parameter settings will be saved until a new change has been made. The new settings will be retained even if the printer is turned OFF.



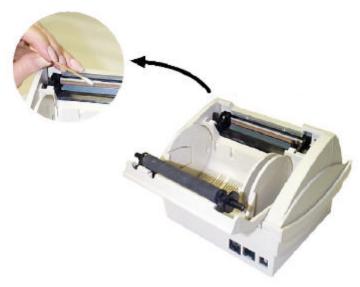
Maintenance and Troubleshooting

5.0 Introduction

This chapter covers the cleaning recommendations as well as some printer troubleshooting. Periodic maintenance will guarantee continued optimum printer performance.

5.1 Cleaning

- > Turn the printer OFF
- Regularly clean the printer case with a damp cloth
- > Do not use liquid cleaners or aerosol cleaners
- Clean the printhead once a month using a cotton swab dampened with isopropyl alcohol.



5.2 Trouble Shooting

Problems are sometimes caused by simple "faults" which can easily be corrected without the help of a service technician. Listed below are common problems and their resolutions.

Problem/Symptom	Resolution
HARDWARE Lights do not come on	Make sure that the power cable is properly inserted into the back of the E-3202. Also make sure that the opposite end of the power supply cable is connected to an appropriate AC power source.
Lights are both on, but the printer does not print.	Make sure that the data cable is properly connected between the E-3202 and the host computer.
Paper guide will not move.	Make sure that you are trying to move the adjustable paper guide and <u>not</u> one of the fixed paper guides. The E-3202 ships with the adjustable paper guide in the far left-hand storage position inside the paper bay. The other two paper guides are glued into position.
	© CLASS*

Problem/Symptom	Resolution
HARDWARE (Cont.) Paper bay door will not close.	It is possible that your roll of paper is too large. Unwrap enough of the media to enable the paper bay door to close.
	It is also possible that one or both of the platen clips has closed. Use your thumb to open the platen clips and then try closing the paper bay door.
The printer makes a grinding sound and produces distorted or condensed print.	Unplug the printer's power cable. Open the paper bay door. Remove the roll of print media and make sure that the roll is tight with no loose coils of media. Replace the media and close the bay door. Power on the printer and try again. If the problem continues contact Technical Support.
The printout looks spotted or dirty.	Clean the printhead as described in the maintenance section of this manual.

Problem/Symptom SOFTWARE	Resolution
The printout includes linear gaps between lines of print.	Disable the AUTO LF and AUTO FF in the E-3202 configuration.
The printer will not print.	Make sure that you have configured your printer correctly. Verify the following settings:
	 Select an emulation that will accommodate your PC's software (ESC/POS® or Epson 24 pin). Make sure that your printer's COM port settings match those of your PC. Make sure that you have a roll of print media properly loaded in the printer.
The printer produces garbage characters when it prints.	Make sure that you have selected the correct emulation. Also make sure that your printer's COM port settings match those of your PC and the printer is not in "Dump" mode.

5.3 Transportation and Storage

Before transporting or storing your printer, please follow the following steps:

- 1. Turn the printer OFF
- 2. Unplug all attached cables
- 3. Place the printer in its original box
- 4. If you plan to use the printer in a foreign country, before plugging your printer to the local power supply, verify that your AC adapter is compatible with the local standards.



6.0 Printing

ITEM	SPECIFICATION
Printing technology	Direct thermal, fixed head
Resolution	203 DPI
	8 dots/mm
Printing Mode	Text or graphics
Printing width	3.35" (85mm)
Printing speed	up to 2"/s (50mm/s)
Character size (H. x V.)	9 x 24 ; 12 x 24 ; 16 x 24
Maximum number of	80 mm /640 dots
characters per line	
9x24	71
$\frac{9x24}{12x24}$	53
12x24 16x24	40
Resident characters sets (for	IBM® 437, 850, 852, 857, 860, 861, 862,
each characters size)	863,858
Emulation	ESC POS®, WINDOWS® EPSON compatible
	24 pin
Print data buffer	SRAM 256 KB
	Flash 512 KB
Paper out detection	Optoelectronic sensor

6.1 Media

See Section 2.2 for more information.

ITEM	SPECIFICATION
Media type	Direct thermal paper
Maximum media width	3.35" (85mm)
Roll dimensions	2.36" (60mm) maximum diameter

6.2 User Interface

ITEM	SPECIFICATION
Power supply connector	Jack type male socket
(rear)	
Communication connector	Mini-DIN socket
(rear)	
Red LED (upper side)	« ON / OFF » and error
Green LED (upper side)	« ON/OFF LINE » , Menu, idle mode
Left hand push button (upper	« ON/OFF », « ON LINE », « YES » functions
side)	
Right hand push button	Line and form feed « LF/FF » and « NO »
(upper side)	function
Parameter settings (printout	Push button entry (with a simultaneous push on
menu)	both buttons)

6.3 Communications

ITEM	SPECIFICATION
Communication type	RS232C
Parameter settings (configuration mode)	Printout menu
Baud rate	1200 to 115200 baud (step by step)
Data format	7 or 8 bits data bits With or w/o parity bit (odd or even) 1 Start bit 1 Stop (free)
Data exchange control	Xon / Xoff or DTR/RTS (active at 0 or 1 level)

6.3.1 Cash Drawer Communications

ITEM	S	SPECIFICATION
Communication type	Cash D	Orawer kick-out interface
Emulation	Epson 24V (*	ΓM-T85, TM-T88) compatible
Connector Type		RJ12
Pin Assignments	<u>Pin#</u>	<u>Signal</u>
	1	Frame Ground
	2	Drawer kick-out signal 1
	3	VCC = +24V
	4	VCC = +24V
	5	Drawer kick-out signal 2
	6	Frame Ground

6.4 Electrical Characteristics

ITEM	SPECIFICATION
Printer supply voltage	16 VAC @ 2.2 A
Power consumption	<50 W printing mode <1 W idle mode (automatic)
AC/DC adapter	In 16 VAC @ 2.2A 230Vac / 50Hz (CE plug) 230Vac / 50Hz (GB plug) 120Vac / 60Hz (US plug)

6.5 Mechanical

ITEM	SPECIFICATION
Material housing	Plastic
Weight of printer	1.43 lbs. (650 g)
Weight of AC/DC adapter	1.98 lbs. (900 g)

6.6 Operation

ITEM	SPECIFICATION
Approvals and Safety	CE; EN55022/B; EN55024; EN60950;
	FCC15; UL1950 (US/C)
Storage conditions	$-4 \text{ to } +140^{\circ}\text{F} / \text{RH} = 5 \text{ to } 90\%$
(w/o paper)	$-20 \text{ to } +60^{\circ}\text{C} / \text{RH} = 5 \text{ to } 90\%$
Operating conditions	$32 \text{ to } +122^{\circ}\text{F} / \text{RH} = 5 \text{ to } 85\%$
	0 to $+40^{\circ}$ C / RH = 5 to 85%

6.7 List of Accessories

ITEM	SPECIFICATION
AC/DC adapter	230V CE plug / 2,3 A @16 VAC 230V GB plug / 2,3 A @16 VAC 120V US plug / 2,2 A @16 VAC
Communication cable	RS232C (DB9S ⇔ Mini-DIN ; 2m)

6.8 Options

Contact your dealer for availability:

Part #	Description
32-2490-01	RS-232 Data Cable
88-2257-01	Programmer's Manual, (available at our website:
	www.datamaxcorp.com).
78-2343-01	Accessories CD



Character Sets and Barcodes

Character sets

The following character sets are available:

Table 437

2 Å→	0-	1-	2-	3-	4-	5-	6-	7-	8-	9-	A -	B-	C-	D-	E-	F-
-0				0	@	P	1	р	Ç	É	á		L	╨	α	=
-1	\odot	T	!	1	Α	Q	a	q	ü	æ	í	388	ユ	=	β	±
-2	•	\$	"	2	В	R	ь	r	é	Æ	ó		-	\neg	Γ	N
-3	•	!!	#	3	C	S	C	s	â	ô	ú		H		π	IA
-4	•	9	\$	4	D	Т	d	t	ä	ö	ñ	\top		Ш	Σ	ſ
-5	+	§	%	5	E	U	е	u	à	ò	Ñ	\exists	+	F	σ	J
-6	•	_	&	6	F	v	f	v	å	û	<u>a</u>	\dashv	F	П	μ	÷
-7	•	<u>‡</u>	,	7	G	w	g	w	ç	ù	ō	П		#	τ	*
-8	•	†	(8	Н	X	h	х	ê	ÿ	i	П	L	+	Φ	0
-9	0	1)	9	I	Y	i	у	ë	Ö	L	ㅠ	F		Θ	•
-A	\bigcirc	-	*	:	J	Z	j	z	è	Ü	Г		ᆜ느	Г	Ω	•
-B	ъ	+	+	;	K	[k	{	ï	¢	1/2	$\overline{}$	7		δ	\checkmark
-C	Q-	_	,	<	L	\	1	_	î	£	1/4	司	ᆘ		8	n
-D	4	+	-	=	M]	m	}	ì	¥	i	Ш	==		ø	2
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-F	ҏ	▼	1	?	0	_	o	\Box	Å	f	»		느		C	

Table 850

2 A→	0-	1-	2-	3-	4-	5-	6-	7-	8-	9-	A -	В-	C-	D-	E -	F-
-0		1		0	æ	P		p	Ç	É	á		L	ð	Ó	-
-1	\odot	7	!	1	Α	Q	a	q	ü	æ	í	388	1	Đ	β	±
-2	(1)	\$	"	2	В	R	ь	r	é	Æ	ó			Ê	Ô	ı
-3	•	1:	#	3	U	S	C	s	â	ô	ú			Ë	Ò	3/4
-4	•	¶	\$	4	D	Т	d	t	ä	ö	ñ	\top		È	õ	¶:
-5	4	§	%	5	E	U	е	u	à	ò	Ñ	Á	+	í	õ	§
-6	•	_	&	6	F	v	f	v	å	û	<u>a</u>	Â	ã	Í	μ	÷
-7	•	<u>‡</u>	,	7	G	w	g	w	ç	ù	ō	À	Ã	Î	þ	٠
-8		1	(8	Н	X	h	х	ê	ÿ	ن	0	ᆫ	ĭ	Þ	0
-9	0	1)	9	I	Y	i	у	ë	Ö	®	⊤	F		Ú	••
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-B	♂"	-	+	;	K	[k	{	ï	Ø	1/2	٦ì	┰		Ù	ì
-C	Q	_	,	<	L	\	1	-	î	£	1/4	_	닏		ŷ	3
-D	4	↔	-	II	M]	m	}	ì	Ø	i	¢	_	1	Ŷ	2
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-F	✡	▼	1	?	0	_	0	\Box	Å	f	>>	Γ	¤		,	

Table 852

2 A→	0-	1-	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
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-1	①	T	!	1	A	Q	a	q	ü	Ĺ	í	3888	ユ	Đ	β	"
-2	•	↔	"	2	В	R	b	r	é	í	ó	****		Ď	Ô	Ĺ
-3	•	_:	#	3	C	S	С	s	â	ô	ú		-	Ë	Ń	>
-4	•	¶	\$	4	D	T	d	t	ä	ö	Ą	\dashv		ď	ń)
-5	+	§	%	5	E	U	е	u	ů	Ľ	ą	Á	+	Ň	ň	§
-6	•	ı	&	6	F	V	f	v	ć	ĭ	ž	Â	Ă	Í	š	÷
-7	•	‡	,	7	G	w	g	w	ç	Ś	ž	Ĕ	ă	Î	š	٠,
-8	•	†	(8	Н	x	h	х	1	ś	Ę	Ş	止	ě	Ŕ	0
-9	0	→)	9	I	Y	i	у	ë	Ö	ę	-	F		Ú	••
-A	\bigcirc	1	*	:	J	Z	j	z	ő	Ü	Г		ᆜᆜ	L	ŕ	•
-B	o	¥	+	;	K	[k	{	ő	Ť	ź	ח	7		Ũ	ũ
-C	Q	١	,	<	L	١	1	_	î	ť	Č	ᆜ	-		ý	Ř
-D	5	‡	-	=	M]	m	}	Ź	L	ş	Ż		Ţ	Ý	ř
-E	f	A		>	N	^	n	~	Ä	х	«	ż	뉴	Ů	ţ	
-F	ఘ	▼	1	?	O	_	o	Δ	Ć	č	»	٦	¤		,	

Table 857

2 A → ↓B	0-	1-	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
-0		V		0	@	P	,	p	Ç	É	á		L	ō	Ó	-
-1	\odot	A	!	1	Α	Q	a	q	ü	æ	í	3335	上	<u>a</u>	β	±
-2	•	\$	"	2	В	R	Ъ	r	é	Æ	ó			Ê	Ô	
-3	>	!!	#	3	C	S	С	s	â	ô	ú		H	Ë	Ò	3/4
-4	•	¶	\$	4	D	Т	d	t	ä	ö	ñ	\dashv		È	õ	9
-5	+	§	%	5	Е	U	e	u	à	ò	Ñ	Á	+		õ	§
-6	•	_	&	6	F	V	f	v	å	û	Ğ	Â	ã	Í	μ	÷
-7	•	‡	,	7	G	W	g	w	ç	ù	ğ	À	Ã	Î		د
-8	•	†	(8	Н	X	h	х	ê	İ	i	©	L	Ϊ	Х	0
-9	0	1)	9	I	Y	i	у	ë	Ö	®	7	F	٦	Ú	••
-A	\bigcirc	→	*	:	J	Z	j	z	è	Ü	Γ		ᆜᆫ	L	Û	•
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Table 860

2 A→	0-	1-	2-	3-	4-	5-	6-	7-		8-	9-	A -	B-	C-	D-	E-	F-
-0		A		0	a	P	`	р		Ç	É	á	::::::	L	ᆚ	α	=
-1	\odot	1	-!	1	A	Q	a	q		ü	À	í	388		_	β	±
-2	•	↔	"	2	В	R	ь	r		é	È	ó			F	Γ	≥
-3	•	!!	#	3	C	s	c	s		â	ô	ú		<u></u>		π	≤
-4	•	9	\$	4	D	Т	d	t		ã	õ	ñ	1		<u> </u>	Σ	ſ
-5	+	§	%	5	Е	υ	е	u		à	ò	Ñ	=	+	F	σ	J
-6	•	_	&	6	F	v	f	v	-	Á	Ú	<u>a</u>	$\exists L$	F	П	μ	÷
-7	•	\$,	7	G	w	g	w		ç	ù	ō	╗	H	#	τ	≈
-8	•	1	(8	Н	X	h	х		ê	Ì	i	7	ᆫ	+	Φ	٥
-9	0	↓)	9	I	Y	i	у		Ê	Õ	Ò	1	F		Θ	•
-A	\bigcirc	-	*	:	J	Z	j	z		è	Ü	٦		ᆜᆜ	Г	Ω	•
-B	♂"	•	+	;	K	[k	{		Í	¢	1/2	1	ᄀᄃ		δ	√
-C	오	<u>_</u>	,	<	L	١	1			Ô	£	1/4	긜	片	-	∞	п
-D	♪	+ >	-	=	M]	m	}		ì	Ù	i	Ш	=		ø	2
-E	J	A		>	N	^	n	~		Ã	Ρt	«	╛	#		ε	
-F	‡	▼	1	?	0	_	o	Δ		Â	Ó	»		<u> </u>		n	

Table 861

2 A →	0-	1-	2-	3-	4-	5-	6-	7-	8-	9-	A-	B-	C-	D-	E-	F-
-0		\		0	@	P	`	р	Ç	É	á		L	╨	α	=
-1	①	7	1	1	Α	Q	a	q	ü	æ	í	33335	ㅗ	_	β	±
-2	•	\$	"	2	В	R	b	r	é	Æ	ó	****	\top	—	Г	≥
-3	¥	!!	#	3	C	S	с	s	â	ô	ú		H	ഥ	π	≤
-4	♦	•	\$	4	D	Т	d	t	ä	ö	Á	\exists		<u> </u>	Σ	ſ
-5	4	§	%	5	E	U	е	u	à	þ	Í	=	+	F	σ	J
-6	•	1	&	6	F	V	f	v	å	û	Ó	\dashv	F	Г	μ	÷
-7	•	‡	,	7	G	W	g	w	ç	Ý	Ú	\neg	⊩	#	τ	*
-8	•	↑	(8	Н	X	h	х	ê	ý	i	7	ᆫ	+	Φ	0
-9	0	↓)	9	I	Y	i	у	ë	Ö	L	ᅦ	F		Θ	•
-A	\bigcirc	→	*	:	J	Z	j	z	è	Ü	Г		ᆜᆜ	Г	Ω	•
-B	ਾਁ	←	+	;	K	[k	{	Đ	ø	1/2	コ	7		δ	√
-C	Ŷ	ட	,	<	L	١	1	ì	ð	£	1/4	븨	IH	_	œ	n
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-E	ſ	▲		>	N	^	n	~	Ä	Pts	«	_	뷰		ε	
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Table 863

2 A→	0-	1-	2-	3-	4-	5-	6-	7-	1	8-	9-	A -	B-	C-	D-	E-	F-
-0		-		0	@	P	`	р		Ç	É	-		L	Ш_	α	=
-1	0	4	!	1	Α	Q	a	q		ü	È	,	33335		=	β	±
-2	•	‡	"	2	В	R	b	r		é	Ê	ó	***	—	\top	Γ	≥
-3	•	!!	#	3	С	S	c	s		â	ô	ú		1	F	π	≤
-4	•	¶_	\$	4	D	Т	d	t	I	Â	Ë	1	\dashv		Ŀ	Σ	ſ
-5	+	§	%	5	E	U	е	u		à	Ï	,	Т	+	E	ь	J
-6	•		&	6	F	v	f	v		4	û	3	\dashv	=	F	μ	÷
-7	•	<u>‡</u>	,	7	G	w	g	w		ç	ù		F	-	+	٦	≈
-8	•	1	(8	Н	X	h	х		ê	¤	Î	Т	╛	+	Φ	c
-9	0	→)	9	I	Y	i	у		ë	Ô	L	示	E		Θ	•
-A	\circ	-	*	:	J	Z	j	z		è	Ü	Г	=	ᆜᆜ	L	Ω	•
- B	♂"	¥	+	;	K	[k	{		ï	¢	1/2	7			δ	$\sqrt{}$
-C	φ	١	,	<	L	1	1			î	£	1/4	귀	ᆜᆜ		8	ם
-D	4	+	-	I	M]	m	}		=	Ù	3/4	日	=		ø	2
- E	T,			^	N	^	n	~		À	Û	«	\mathbb{T}	1		8	
-F	✡	▼	1	?	0		0	\triangle		§	f	»	٦	=		ſ	

ASCII Control Code Chart

	Char	Dec	Hex	Char	Dec	Hex	Char	Dec	Hex	Char	Dec	He x
Ctrl @	NUL	0	00		32	20	@	64	40	`	96	60
Ctrl A	SOH	1	01	!	33	21	A	65	41	a	97	61
Ctrl B	STX	2	02	"	34	22	В	66	42	b	98	62
Ctrl C	EXT	3	03	#	35	23	С	67	43	С	99	63
Ctrl D	EOT	4	04	\$	36	24	D	68	44	d	100	64
Ctrl E	ENQ	5	05	%	37	25	Е	69	45	e	101	65
Ctrl F	ACK	6	06	&	38	26	F	70	46	f	102	66
Ctrl G	BEL	7	07	4	39	27	G	71	47	g	103	67
Ctrl H	BS	8	08	(40	28	Н	72	48	h	104	68
Ctrl I	HT	9	09)	41	29	I	73	49	i	105	69
Ctrl J	LF	10	0A	*	42	2A	J	74	4A	j	106	6A
Ctrl K	VT	11	0B	+	43	2B	K	75	4B	k	107	6B
Ctrl L	FF	12	0C	,	44	2C	L	76	4C	1	108	6C
Ctrl M	CR	13	0D	-	45	2D	M	77	4D	m	109	6D
Ctrl N	SO	14	0E		46	2E	N	78	4E	n	110	6E
Ctrl O	SI	15	0F	/	47	2F	О	79	4F	0	111	6F
Ctrl P	DLE	16	10	0	48	30	P	80	50	p	112	70
Ctrl Q	DC1	17	11	1	49	31	Q	81	51	q	113	71
Ctrl R	DC2	18	12	2	50	32	R	82	52	r	114	72
Ctrl S	DC3	19	13	3	51	33	S	83	53	S	115	73
Ctrl T	DC4	20	14	4	52	34	T	84	54	t	116	74
Ctrl U	NAK	21	15	5	53	35	U	85	55	u	117	75
Ctrl V	SYN	22	16	6	54	36	V	86	56	V	118	76
Ctrl W	ETB	23	17	7	55	37	W	87	57	W	119	77
Ctrl X	CAN	24	18	8	56	38	X	88	58	X	120	78
Ctrl Y	EM	25	19	9	57	39	Y	89	59	у	121	79
Ctrl Z	SUB	26	1A	:	58	3A	Z	90	5A	Z	122	7A
Ctrl [Esc	27	1B	;	59	3B	[91	5B	{	123	7B
Ctrl \	FS	28	1C	<	60	3C	\	92	5C		124	7C
Ctrl]	GS	29	1D	=	61	3D]	93	5D	}	125	7D
Ctrl ^	RS	30	1E	>	62	3E	٨	94	5E	~	126	7E
Ctrl_	US	31	1F	?	63	3F		95	5F		127	7F

A-8

Char	Dec	Hex	Char	Dec	Hex	Char	Dec	Hex	Char	Dec	Hex
Ç	128	80	á	160	A0		192	C0	Ó	224	E0
ü	129	81	í	161	A1		193	C1	ß	225	E1
é	130	82	ó	162	A2		194	C2	Ô	226	E2
â	131	83	ú	163	A3		195	C3	Ò	227	E3
ä	132	84	ñ	164	A4		196	C4	õ	228	E4
à	133	85	Ñ	165	A5		197	C5	Õ	229	E5
å	134	86	a	166	A6	ã	198	C6	μ	230	E6
ç	135	87	0	167	A7	Ã	199	C7	р	231	E7
ê	136	88	i	168	A8		200	C8	р	232	E8
è	137	89	®	169	A9		201	C9	Ú	233	E9
è	138	8A		170	AA		202	CA	Û	234	EA
ï	139	8B	1/2	171	AB		203	CB	Ù	235	EB
î	140	8C	1/4	172	AC		204	CC	у́	236	EC
ì	141	8D	i	173	AD		205	CD	Ϋ́	237	ED
Ä	142	8E		174	AE		206	CE		238	EE
Å	143	8F	_	175	AF		207	CF		239	EF
É	144	90		176	В0	Ò	208	D0		240	F0
Æ	145	91		177	B1	D	209	D1	±	241	F1
Æ	146	92	2	178	B2	Ê	210	D2		242	F2
ô	147	93	3	179	В3	Ë	211	D3	3/4	243	F3
ö	148	94	′	180	B4	È	212	D4		244	F4
ò	149	95	Á	181	В5		213	D5		245	F5
û	150	96	Â	182	В6	Í	214	D6	÷	246	F6
ù	151	97	À	183	В7	Î	215	D7		247	F7
ÿ	152	98	©	184	В8	Ϊ	216	D8	0	248	F8
Ö	153	99	1	185	В9		217	D9		249	F9
Ü	154	9A		186	BA		218	DA		250	FA
Ø	155	9B	»	187	BB		219	DB		251	FB
£	156	9C		188	BC		220	DC		252	FC
Ø	157	9D	¢	189	BD		221	DD		253	FD
X	158	9E	¥	190	BE	Ì	222	DE		254	FE
f	159	9F		191	BF		223	DF	€	255	FF

Barcodes

The printer supports the following barcode symbologies:

Standard barcodes

- UPC-A (+2, +5)
- UPC-E (+2+5)
- \blacksquare EAN8 (+2 +5)
- \blacksquare EAN13 (+2 +5)
- Code39 (with/without CS)
- ITF (with/without CS)
- Code 2/5
- Code 93
- CODABAR
- Code 128 (A, B, C, Autoswitching)
- Code 128 EAN
- Postnet (5, 6, 8, 9, 11)
- EAN 128

2D barcodes

- PDF 417
- MaxiCode
- QRCode

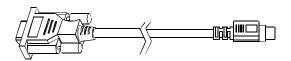
These barcodes are "native", which improves the print speed. But as the printer is able to print any bitmap image. Other barcodes printed by the printer will be considered as images.



Appendix B

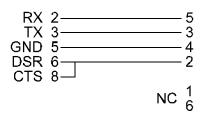
Printer cable Pin assignment

Cable part number: 32-2490-01



DB9S









Appendix C

Opening Methods and Warnings

There are several different ways to open the E-3202 depending on the size of the operator's hand.



Option #1. Grasp the E-3202 in the palms of both hands. Using your thumbs against the front edge of the E-3202 paper bay door, push up to open the door.



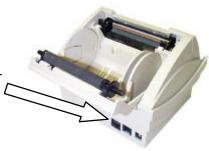
Option #2. Hold the base of the E-3202 in one hand. Using the other hand, place your thumb against the back of the paper bay door. Using your fingers on the front edge of the paper bay door, pull the door open.



Option #3. Hold the base of the E-3202 in one hand. Using the other hand, place your fingers against the back of the paper bay door. Using your thumb on the front edge of the paper bay door, pull the door open.

Warnings

DO NOT connect this printer to any type of telephone line, telephone equipment or any other peripherals not specifically designed to operate with this printer.



DO NOT discard the adjustable media guide. You will need it when using different width media. It is found in the far left-hand position.





Datamax Barcode Products Limited Warranty Statement

E-3202/Cash Drawer Printer

Printer

Datamax warrants to Purchaser that under normal use and service, the E-3202, (with the exception of the thermal printhead) purchased hereunder shall be free from defects in material and workmanship for a period of (365) days from the date of shipment by Datamax.

Expendable and/or consumable items or parts such as lamps, fuses, and paper are not covered under this warranty. This warranty does not cover equipment or parts which have been misused, altered, neglected, handled carelessly, or used for purposes other than those for which they were manufactured. This warranty also does not cover loss, damages resulting from accident, or damages resulting from unauthorized service.

Thermal Printhead

This warranty is limited to a period of one year, (365 days), or 1,000,000 linear inches of use, whichever comes first, for the E-3202 thermal printhead. This one year (365 days) warranty is valid only if a Datamax - approved thermal media is used, as defined in the then current Datamax list of approved thermal/thermal transfer media, a copy of which is available from Datamax. Failure to use Datamax-approved media is justification for invalidation of this thermal printhead warranty. This warranty does not cover printheads which have been misused, altered, neglected, handled carelessly, or damaged due to improper cleaning or unauthorized repairs.

Warranty Service Procedures

If a defect should occur during the warranty period, the defective unit shall be returned, freight and insurance prepaid, in the original shipping containers, to Datamax at: 4724 Parkway Commerce Blvd., Orlando, Florida, 32808. A Return Material Authorization (RMA) number must be issued before the product can be returned. To open an RMA please call the Datamax Customer Service Department at (407) 523-5550. Please include your RMA number on the outside of the box and on the shipping document. Include a contact name, action desired, a detailed description of the problem(s), and examples when possible with the defective unit. Datamax shall not be responsible for any loss or damages incurred in shipping. Any warranty work to be performed by Datamax shall be subject to Datamax's confirmation that such product meets Datamax warranty. In the event of a defect covered by its warranty, Datamax will return the repaired or replaced product to the Purchaser at Datamax's cost.

With respect to a defect in hardware covered by the warranty, the warranty shall continue in effect until the end of the original warranty period, or for sixty (60) days after the repair or replacement, whichever is later.

General Warranty Provisions

Datamax makes no warranty as to the design, capability, capacity or suitability of any of its hardware, supplies, or software.

Software is licensed on an "as is" basis without warranty. Except and to the extent expressly provided in this warranty and in lieu of all other warranties, there are no warranties, expressed or implied, including, but not limited to, any warranties of merchantability or fitness for a particular purpose.

Purchaser shall be solely responsible for the selection, use, efficiency and suitability of Datamax's products.

Limitation of Liability

In no event shall Datamax be liable to the purchaser for any indirect, special or consequential damages or lost profits arising out of or relating to Datamax's products, or the performance or a breach thereof, even if Datamax has been advised of the possibility thereof. Datamax's liability, if any, to the purchaser or to the customer of the purchaser hereunder shall in no event exceed the total amounts paid to Datamax hereunder by the purchaser for a defective product.

In no event shall Datamax be liable to the purchaser for any damages resulting from or related to any failure or delay of Datamax in the delivery or installation of the computer hardware, supplies or software or in the performance of any services.

Some states do not permit the exclusion of incidental or consequential damages, and in those states the foregoing limitations may not apply. The warranties here give you specific legal rights, and you may have other legal rights which vary from state to state.